

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
Amoco PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
P.O. DRAWER A, LEVELLAND, TEX 79336

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
1940'FNL x 810'FEL SEC.22 (SE1/4, NE1/4), UNIT H
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
15 MILES SOUTH OF EUNICE, NM

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)
810

16. NO. OF ACRES IN LEASE
1000

17. NO. OF ACRES ASSIGNED
TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.
1020

19. PROPOSED DEPTH
5800

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3230.7 GR

22. APPROX. DATE WORK WILL START*

5. LEASE DESIGNATION AND SERIAL NO.
LC 032450(a)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
SOUTH MATTIX UNIT

8. FARM OR LEASE NAME
SOUTH MATTIX UNIT

9. WELL NO.
29

10. FIELD AND POOL, OR WILDCAT
FOUNDER UPPER YESO

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
23-24-37 NMPM

12. COUNTY OR PARISH
LEA

13. STATE
NM

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11" 12 1/4"	8 5/8"	24 #	1000	CIRCULATE
7 7/8"	5 1/2"	14-15.5 #	5745	CIRCULATE

after reaching TD, run logs and evaluate. Perforate and
stimulate as necessary to attempt commercial production.

MUD PROGRAM: O-SCP NATIVE MUD
SCP-TD BRINE WITH MINIMUM PROPERTIES TO
MAINTAIN GOOD HOLE CONDITIONS.

BOP PROGRAM ATTACHED

Unless Drilling Operations have
Commenced, this drilling approval
Expires 10-21-77

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

(TO SHARE PRODUCTION UNIT WITH WELL NO. 18)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Kenneth Brand TITLE Senior Staff Post DATE 6-30-77

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

- 0+4-USGS, ART
- 1-DIV
- 1-KWB
- 1-CONOCO
- 1-CHEVRON
- 1-TENNECO
- 1-ARCO

TITLE _____
"APPROVAL TO FLARE GRANTED
WHILE DRILLING AND TESTING."

*See Instructions On Reverse Side

APPROVED
AS AMENDED
JUL 21 1977
BERNARD MOROZ
ACTING DISTRICT ENGINEER

RECEIVED

JUL 2 1977

OIL CONSERVATION COMM.
HOBBS, N. M.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PL.

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

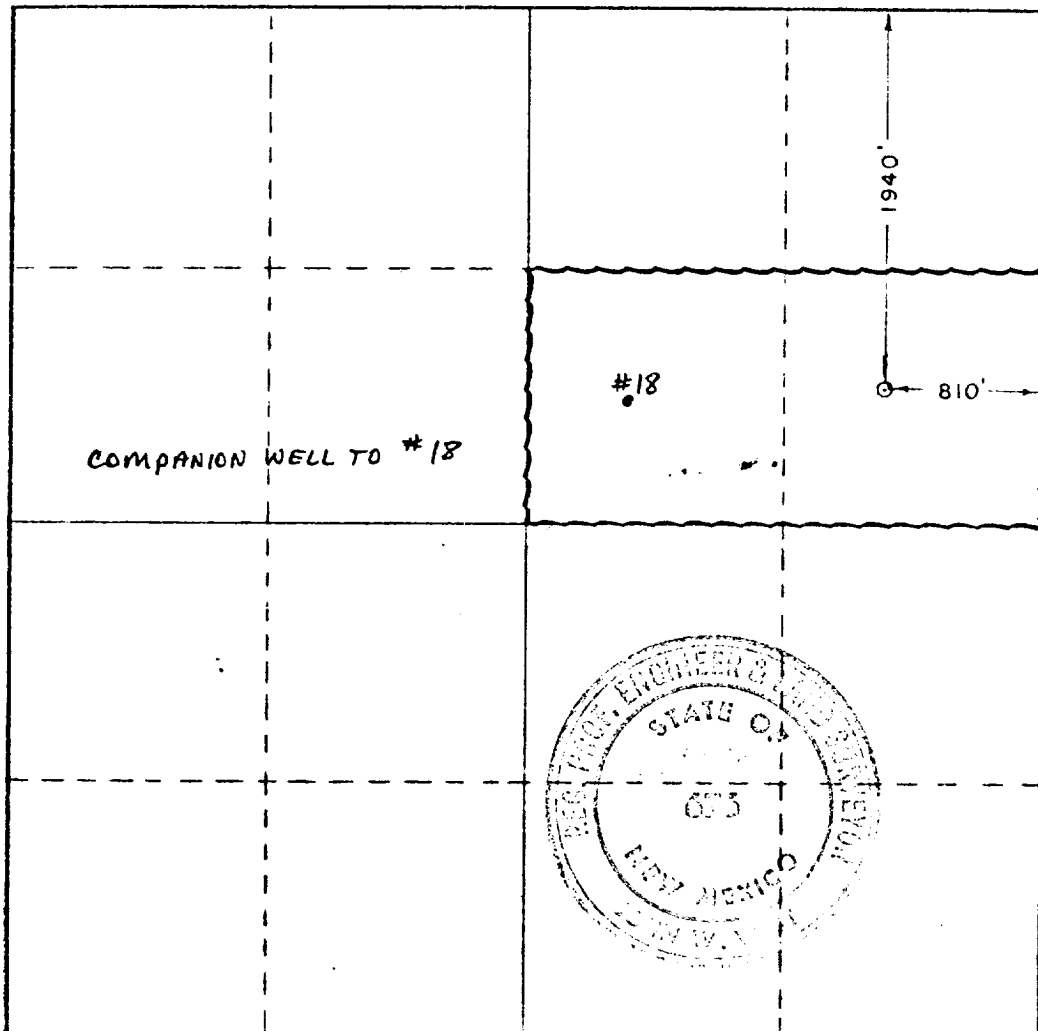
Operator AMOCO PRODUCTION COMPANY		Lease South Mattix Unit		Well No. 29
Well Letter H	Section 22	Township 24 South	Range 37 East	County Lea
Actual Well Location of Well:				
1940 feet from the north line and		810 feet from the east line		
Ground Level Elev. 3230.7	Producing Formation UPPER YESO	Pool FOWLER UPPER YESO	Dedicated Acreage 80 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation UNITIZED

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

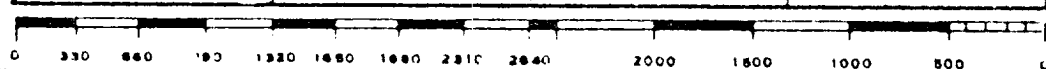
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Kenneth Brand
Position Senior Staff Assistant
Company Amoco Production Company
Date 6-30-77

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
June 9, 1977
Registered Professional Engineer
and/or Land Surveyor

John W. West
Certificate No. **676**



RECEIVED

JUL 2 1957

OIL CONSERVATION COMM.
HOBBS, N. M.

Attachment to "Application for Permit to Drill" Form 9-331 C

South Mattix Unit Federal #29, Unit H, 1940' FNL and 810' FEL, Section 22,
Township 24 South, Range 37 East, Lea County, New Mexico

1. Location (See Attached Form C-102)

2. Elevation (See Attached Form C-102)

3. Geologic name of surface formation

Unknown

4. Type of drilling tools and associated equipment to be utilized.
(See Form 9-331 C)

5. Proposed drilling depth. (See Form 9-331 C)

6. Estimated tops of important geologic markers.

Anhydride 1150

San Andres 3880

Glorietta 4820

Upper Yeso 5090

7. Estimated depths at which anticipated water, oil, gas or other mineral bearing
formations are expected to be encountered.

San Andres 3880

Glorietta 4820

Upper Yeso 5090

8. Proposed casing program including size, grade, and weight of each string and whether
it is new or used. (See Form 9-331 C)

9. Proposed setting depth of each casing string and the amount and type of cement (including
additives) to be used. (See Form 9-331 C)

10. Operator's minimum specifications for pressure control equipment which is to be used, a schematic diagram thereof showing sizes, pressure ratings (or API series) and the testing procedures and testing frequency. (See Attached BOP Program)
-
-
-
-
11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.
- 0 - Surface Casing Point -- Native Mud
- SCP - TD -- Brine with minimum properties to maintain good hole conditions.
-
-
-
-
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.
- Gamma Ray - Compensated Neutron - Formation Density, Caliper - Dual laterolog with Micro-SFL.
-
-
-
-
13. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.
- None
-
-
-
-
14. Anticipated starting date and duration of operation.
- ASAP
-
-
15. Other facets of the proposed operation, operator wishes to point out for the Geological Survey's consideration of the application.
- None

ATTACHMENT TO FORM 9-331C

APPLICATION FOR PERMIT TO DRILL

LEASE South Mattix Unit Federal WELL NO. 29

LOCATION Unit H, Sec. 22, T-24-S, R-37-E

POOL Fowler Upper Yeso

COUNTY Lea STATE New Mexico

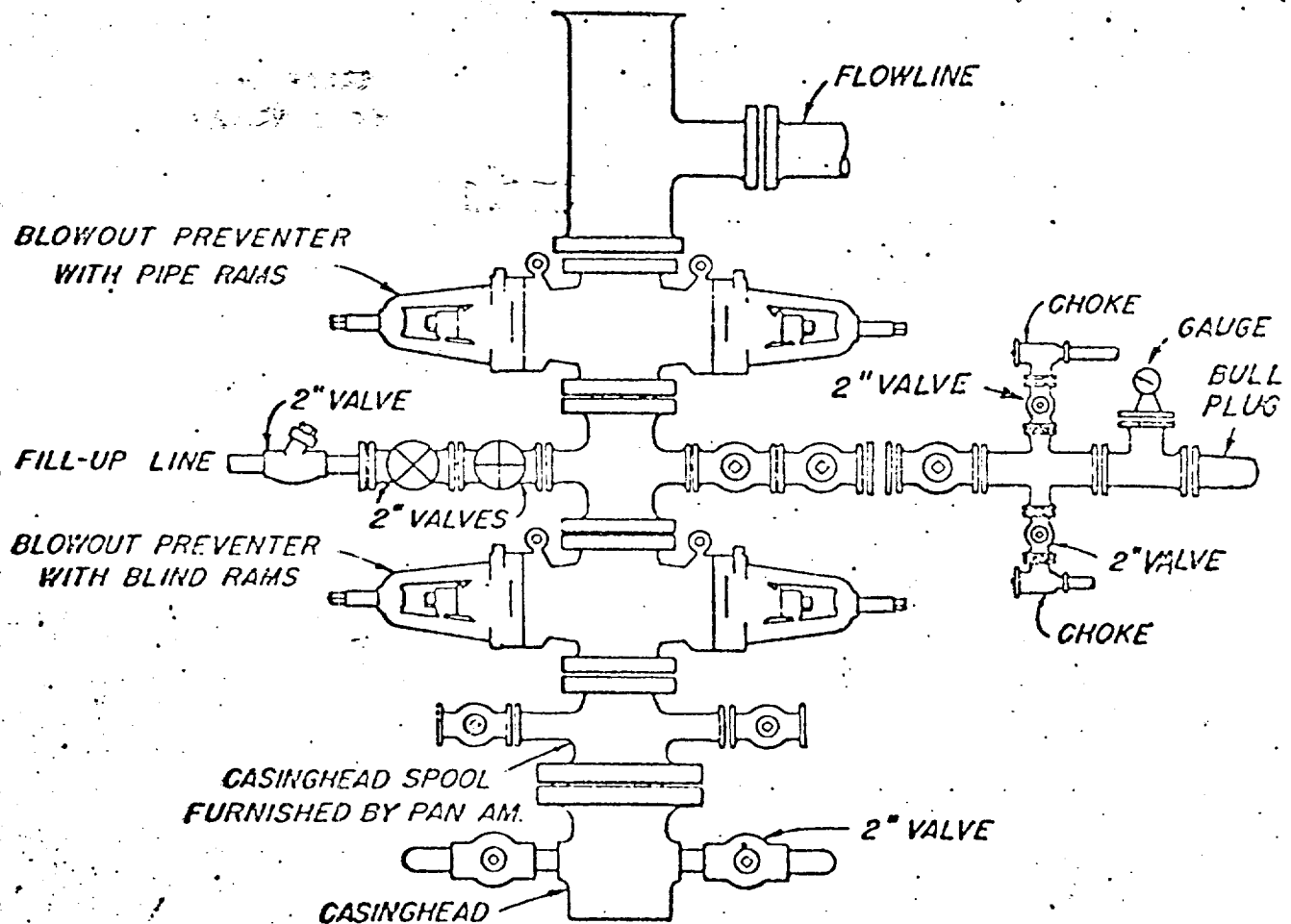
The undersigned hereby states that Amoco's representative, Mr. J.H. Hankins, personally contacted Mrs. R. J. Doom, Eunice, NM, the owner/leasee of the surface land where the proposed work is to be conducted and advised him of the proposed work, the construction site and pertinent roads included in the project. It is further stated that, upon being fully advised of the extent of the work and the effect upon the surface, said owner has consented to the said work and that agreement as to the compensation for damages to the surface estate has been reached.

Kenneth Brand
Kenneth Brand
Senior Staff Assistant

6-30-77

Date

1. Blow-out preventers and master valve to be fluid operated and all fittings must be in good condition, 3,000# W.P. (6,000 p.s.i. test) minimum.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above blow-out preventer shall be same size as casing being drilled through.
4. Kelly cock required, 3,000# W.P. (6,000 p.s.i. test), minimum.
5. OMSCO or comparable safety valve must be available on rig floor at all times with proper connection or sub, 3,000# W.P. (6,000 p.s.i. test), minimum.
6. Blow-out preventers and master valve while drilling intermediate hole to 6,000' may be 2,000# W.P. (4,000 p.s.i. test), minimum.
7. Choke assembly, beyond second valve from cross, may be positioned (Optional) outside of derrick foundation.
8. Spool or cross may be eliminated if connections are available in the lower part of the blow-out preventer body.
9. Plug valves - gate valves are optional. Valves shown as 2" are minimum size.
10. Casing head and casing head spool, including attached valves, to be furnished by Pan American.
11. Rams in preventers will be installed as follows:
 When drilling, use:
 Top Preventer - Drill pipe rams
 Bottom Preventer - Blind rams or master valve
 When running casing, use:
 Top Preventer - Casing rams
 Bottom Preventer - Blind rams or master valve.



BLOWOUT PREVENTER HOOK-UP
 PAN AMERICAN PETROLEUM CORP.

EXHIBIT D-1 MODIFIED

Proposed Development Plan for Surface Use

Amoco Production Company's South Mattix Unit Federal #29,
Unit H, Sec. 22, T-24-S, R-37-E

This plan is an attachment to "Application for Permit to Drill" and is a discussion of the possible effects the drilling of this well/wells might have on the environment. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. Existing roads including location of exit from main highway.

Location is approximately 15 miles south of Eunice, New Mexico

2. Planned access roads. (Width, maximum grade, turnout, drainage design, location and size of culverts and surfacing material, where fences will be cut, and where gates or cattleguard will be used.) (See Exhibit B)

None

3. Location of existing wells. (See Exhibit B)
(2-Mile radius for exploratory wells; 1-Mile radius for development wells)

4. Location of tank batteries and flow lines.

See Attached Map

5. Location and type of water supply.

X Water to be hauled _____ Water to be piped.

EXISTING WELL ON LEASE 1/2 MILE SOUTH OF LOCATION

6. Source of construction materials.

NONE REQUIRED

7. Methods for handling waste disposal. Well cuttings will be disposed of in reserve pit. Suitable trash pits or containers will be provided at location for containment. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically.

Other (See Drilling Pad Drawing)

8. Ancillary facilities. (Location of camps and airstrips to be installed.)
None None (See Attached Map)

9. Well site layout. (See Attached Rig Layout)

(a) Size of Drilling Location 220' X 150'

(b) Compacted SURFACE SUITABLE FOR PAD

(c) Surfaced No

10. Plans for restoration of surface.

X Producing Well - all pits will be cut, filled, and levelled as soon as practical to original condition with rehabilitation to commence following removal of drilling and completion equipment. Rehabilitation to be completed in 45 days if possible.

X Dry Hole - same as above with dry hole marker to be installed and surface reseeded if required.

11. Other information that may be used in evaluating the impact on the environment.

(a) Terrain Flat

(b) Soil Sand & Caliche

(c) Vegetation Sparse

(d) Surface Use Grazing

(e) Ponds and Streams None

(f) Water Wells 1 WELL 1/2 MILE SOUTH OF LOCATION

(g) Residences and Buildings None

(h) Arroyos, Canyons, etc. None

(i) Well sign Posted at Drilling Site

(j) Open pits All pits containing liquid or mud will be fenced.

(k) Archaeological Resources None Observed

12. Operators Representative.
(Field personnel responsible for compliance with development plan for surface use.)

O. R. Williams, Area Foreman

P. O. Drawer A

Levelland, Texas 79336

Phone (806) 894-3167

LEASE & WELL NUMBER SOUTH DIATIX UNIT #1
LOCATION UNIT H, SEC. 22, T-34-S, R-32-E

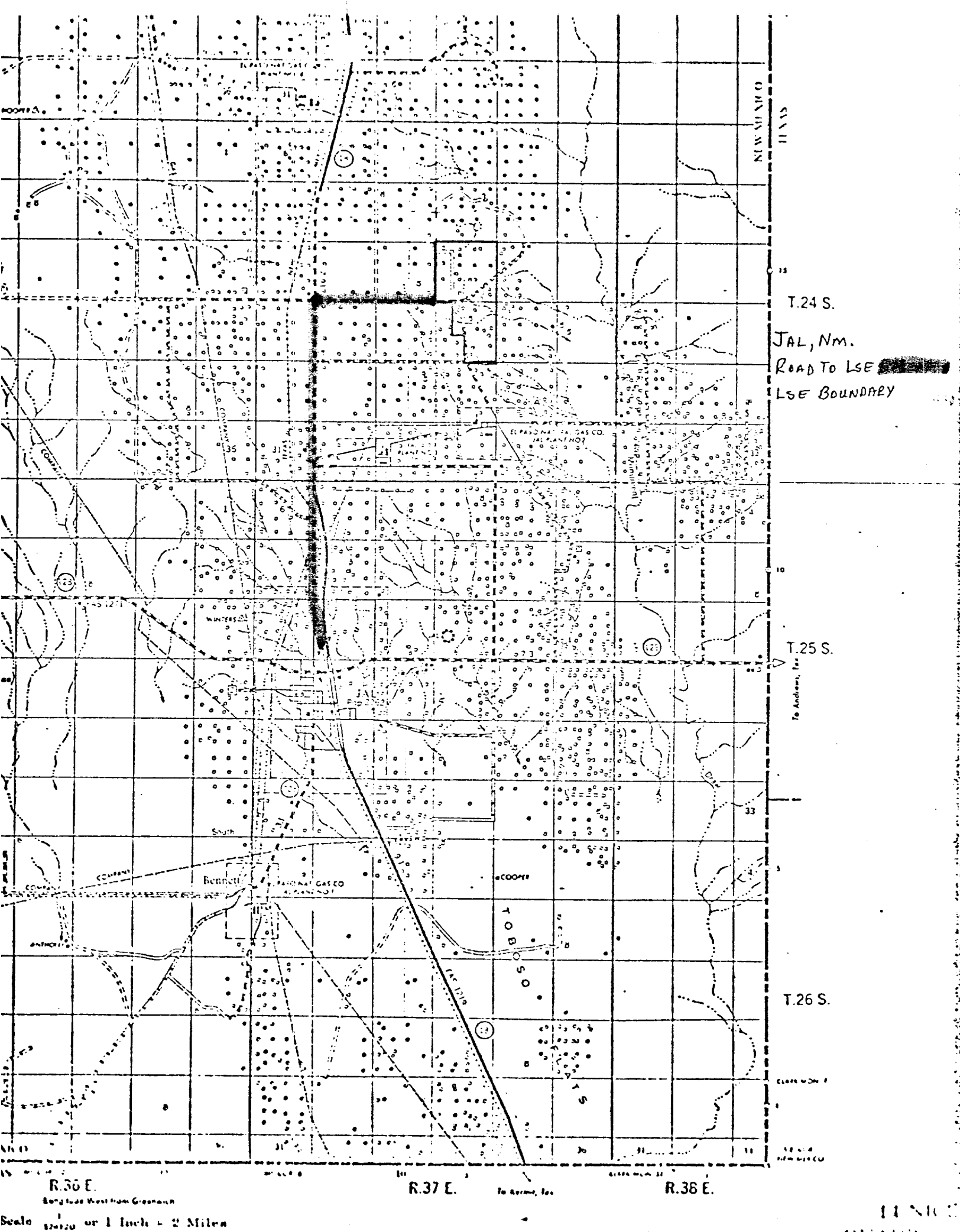
ATTACHMENT TO PROPOSED DEVELOPMENT PLAN FOR SURFACE USE, AND FORM 9-331C

13. Certification: The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan:

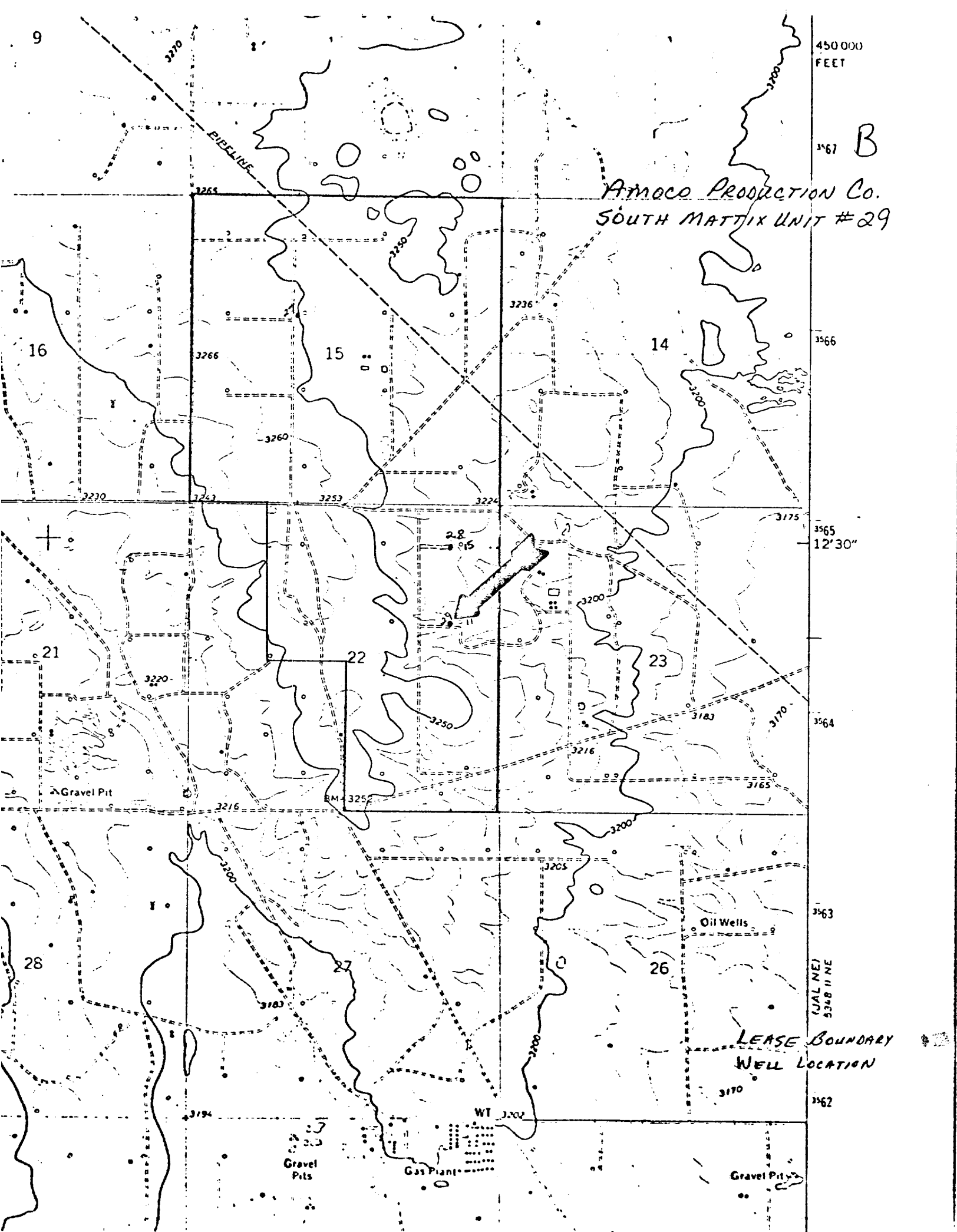
I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by: Amoco Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

6-30-77
DATE

Orville J. Allen Area Foreman
NAME AND TITLE



Amoco PRODUCTION Co.
SOUTH MATTHEW UNIT #29





moco Production Company

ENGINEERING CHART

SHEET NO.

OF

FILE

APPN

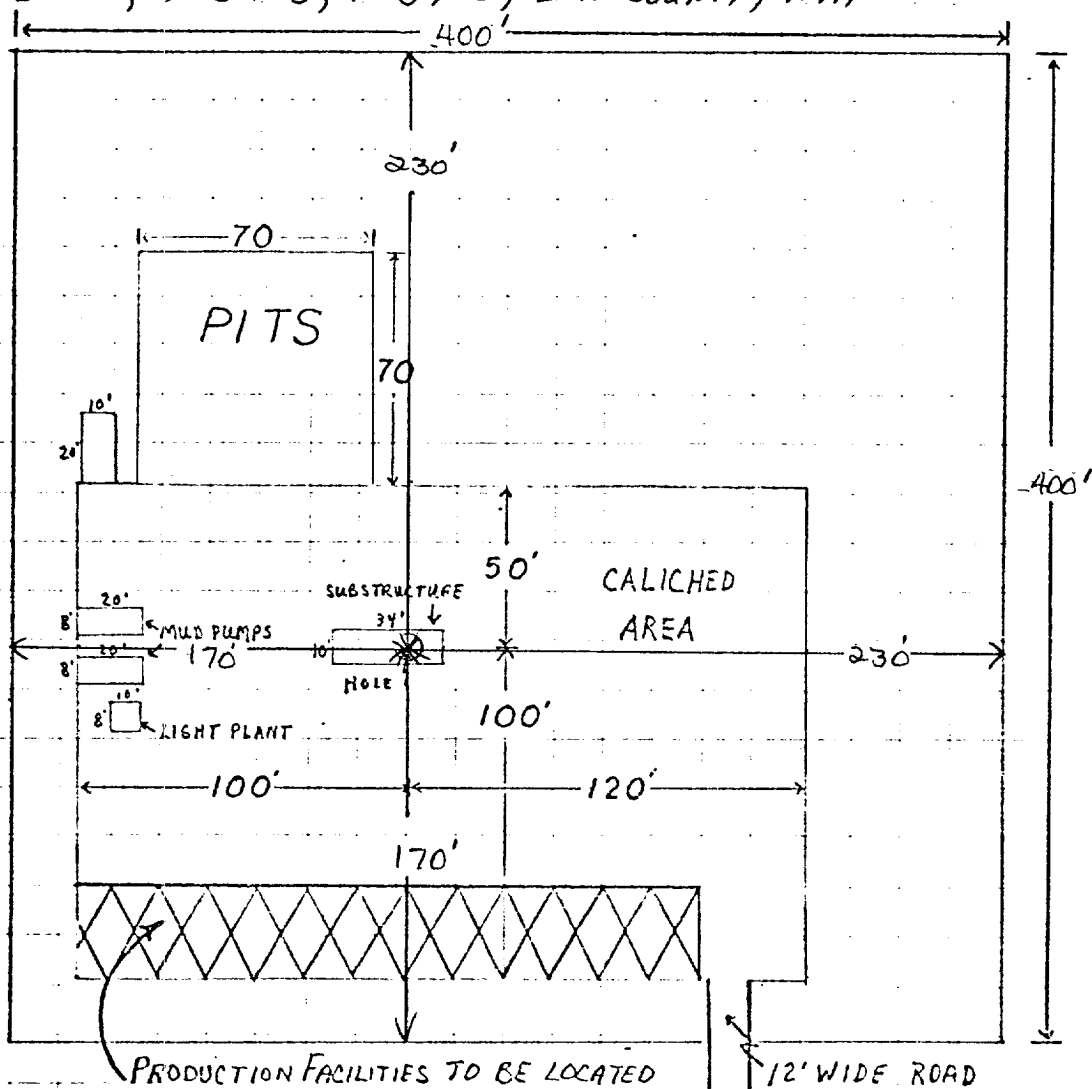
DATE 10-29-76

BY RC
SCALE - 1" = 60'

SUBJECT DRILL SITE DIMENSION

SHALLOW WELLS (LESS THAN 7500')

SOUTH MATTIX UNIT # 29
UNIT # (SE1/4, NE1/4) 1940' FNL X 810' FEL
SEC. 22, T-24-S, R-37-E, LEA COUNTY, NM



PRODUCTION FACILITIES TO BE LOCATED
HERE IF WELL IS PRODUCTIVE
(TANKS, SEPARATORS, TREATERS, DEHYDRATORS, ETC.)

CELLAR SIZE

5' X 5' X 4'

Archaeological Clearance Report

for

Amoco Production Company

South Mattix Unit #29

South Mattix Unit #28

South Mattix Unit #27

by

Rodrick B. MacLennan

Submitted by

Dr. J. Loring Haskell

Operations Director and

Principal Investigator

Agency of Conservation Archaeology

Eastern New Mexico University

Portales

27 June 1977

INTRODUCTION

The Agency of Conservation Archaeology, Eastern New Mexico University, Portales, recently completed an archaeological reconnaissance southeast of Eunice, Lea County, New Mexico, on lands administered by the Bureau of Land Management. The areas surveyed will be impacted by the construction of companion wells and drill pads.

The survey was initiated at the request of Amoco Production Company and was administered by Mr. Kenneth Brand, representative for Amoco Production Company, and Dr. J. Loring Haskell, Operations Director and Principal Investigator, Agency of Conservation Archaeology, Eastern New Mexico University, Portales.

The survey was accomplished by Rodrick B. MacLennan on 22 June 1977 under Federal Antiquities Permit No. 77-NM-021.

SURVEY TECHNIQUE

The survey was completed by the archaeologist walking a series of transects in a zigzag pattern the length and breadth of the drill pad. This technique permitted optimal examination of the areas of primary and secondary impact.

South Mattix Unit #29

LOCATION

The drill pad will measure 400 ft by 400 ft and will be centered in the:

SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 22, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal Northwest Quadrangle, 7.5 minute series.

TERRAIN

Local terrain consists of a salt plain characterized by desert pavement.

FLORISTICS

The areal floral assemblage consists of unidentified grasses with Yucca spp.,

Ephedra spp., and Opuntia spp.

CULTURAL RESOURCES

No cultural resources were recorded during this reconnaissance.

RECOMMENDATIONS

ACA recommends clearance for the proposed drill site and suggests that construction proceed without modification of existing plans.

South Mattix Unit #28

LOCATION

The drill pad will measure 400 ft by 400 ft and will be centered in the:

NE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 22, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal Northeast Quadrangle, 7.5 minute series.

TERRAIN

Local terrain consists of a flat plain characterized by a desert pavement.

FLORISTICS

The areal floral assemblage consists of unidentified grasses with Yucca spp., Ephedra spp., and Opuntia spp.

CULTURAL RESOURCES

No cultural resources were recorded during this reconnaissance.

RECOMMENDATIONS

ACA recommends clearance for the proposed drill site and suggests that construction proceed without modification of existing plans.

South Mattix Unit #27LOCATION

The drill pad will measure 400 ft by 400 ft and be centered in the:

SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 15, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal Northeast Quadrangle, 7.5 minute series.

TERRAIN

Local terrain consists of a flat plain characterized by a desert pavement.

FLORISTICS

The areal floral assemblage consists of unidentified grasses with Yucca spp, Ephedra spp., and Opuntia spp.

CULTURAL RESOURCES

No cultural resources were recorded during this reconnaissance.

RECOMMENDATIONS

ACA recommends clearance for the proposed drill site and suggests that construction proceed without modification of existing plans.

U. S. Geological Survey

HOBBS DISTRICT

Amoco Production Co.
No. 29 South Mattix Unit
SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 22-24S-37E
Lea County, New Mexico

Above Data Required on Well Sign

CONDITIONS OF APPROVAL

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Drilling Operations on Federal Oil and Gas Leases, dated January 1, 1977.
2. Notify this office (telephone (505) 393-3612) when the well is to be spudded and in sufficient time for a representative to witness all cementing operations. Attached are names and telephone numbers of Geological Survey and Bureau of Land Management personnel who are available for consultation during construction, drilling, completion, and rehabilitation activities.
3. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life.
4. Secure prior approval of the District Engineer for variance from the approved drilling program and before commencing plugging operations, plug-back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely.
5. Blowout prevention equipment is to be installed, tested, and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.
6. Operations must be in compliance with the provisions of the landowner agreement concerning surface disturbance and surface restoration.